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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,810	11/13/2001	Mark Troll	10004082-1	3073

7590 07/23/2004

AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

SIMONE, CATHERINE A

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,810

Applicant(s)

TROLL, MARK

Examiner

Catherine Simone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 and 49-62 is/are pending in the application.
- 4a) Of the above claim(s) 7-32 and 49-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Withdrawn Rejections

1. The 35 U.S.C. 103 rejection of claims 1-6 over Sato et al. in view of Miyazawa et al. of record in the Office Action mailed 3/2/04, Pages 3-6, Paragraph #3 has been withdrawn due to the Applicant's response filed 5/10/04.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1 and 3** are rejected under 35 U.S.C. 102(b) as being anticipated by Attridge (5,166,515).

Troll discloses a device comprising a solid component (waveguide) and a liquid composition interfaced therewith, the liquid composition having a refractive-index that is substantially equal to that of the solid component (see col. 3, lines 8-12), the liquid composition consisting of one or more benzene or substituted benzene (see col. 8, line 43).

4. **Claims 1, 3 and 5** are rejected under 35 U.S.C. 102(b) as being anticipated by Becker et al. (5,382,985).

Regarding **claims 1 and 3**, Becker et al. discloses a device comprising a solid component (substrate) and a liquid composition interfaced therewith, the liquid composition having a

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refractive-index that is substantially equal to that of the solid component (see col. 4, Table I and Table II), the liquid composition consisting of a combination comprising one or more benzene or substituted benzene and optionally at least one of an alkane or substituted alkane having a boiling point less than about 130°C (see col. 4, lines 57-59). Regarding **claim 5**, note the alkane is substituted with a hydroxy or an alkoxy group (see col. 4, lines 58-59).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1, 2 and 6** are rejected under 35 U.S.C. 102(e) as being anticipated by Fouquet et al. (6,324,316).

Fouquet et al. discloses a device comprising a solid component (waveguide) and a liquid composition interfaced therewith, the liquid composition having a refractive-index that is substantially equal to that of the solid component, the liquid composition consisting of saturated cyclic compounds consisting essentially of carbon and hydrogen and optionally oxygen (see col. 7, lines 38-44). Regarding **claim 2**, note the liquid composition is a saturated cyclic compound comprising one or two rings, each having at least four atoms in the ring (see col. 7, lines 43-44). Regarding **claim 6**, note the device comprises a groove (trench) in a substrate (see col. 3, lines 24-25).

7. **Claims 1, 2 and 6** are rejected under 35 U.S.C. 102(e) as being anticipated by Myer et al. (6,532,319).

Myer et al. discloses a device comprising a solid component (waveguide) and a liquid composition interfaced therewith, the liquid composition having a refractive-index that is substantially equal to that of the solid component (see col. 5, lines 59-61), the liquid composition consisting of saturated cyclic compounds consisting essentially of carbon and hydrogen and optionally oxygen (see col. 5, lines 63-64). Regarding **claim 2**, note the liquid composition is a saturated cyclic compound comprising one or two rings, each having at least four atoms in the ring (see col. 5, lines 63-64). Regarding **claim 6**, note the device comprises a groove (trench) in a substrate (see col. 1, lines 45-47).

8. **Claims 1-3** are rejected under 35 U.S.C. 102(e) as being anticipated by Troll (6,377,873).

Regarding **claims 1** and **3**, Troll discloses a device comprising a solid component (waveguide) and a liquid composition interfaced therewith, the liquid composition having a refractive-index that is substantially equal to that of the solid component (see col. 3, lines 8-12), the liquid composition being selected from the group consisting of saturated cyclic compounds consisting essentially of carbon and hydrogen and optionally oxygen and one or more benzene or substituted benzene (see col. 10, lines 38-43). Regarding **claim 2**, note the liquid composition is a saturated cyclic compound comprising one or two rings, each having at least four atoms in the ring (see co. 10, line 39).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. (5,382,985) or Attridge (5,166,515) or Troll (6,377,873).

Becker et al., Attridge and Troll each disclose a device comprising a solid component and a liquid composition interfaced therewith, the liquid composition having a refractive-index that is substantially equal to that of the solid component, the liquid composition consisting of a one or more benzene or substituted benzene. However, each fails to disclose the weight percent of the benzene or substituted benzene being between 30% to about 90%. The optimum range for the weight percent of benzene or substituted benzene would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the benzene or substituted benzene in Becker et al. or Attridge or Troll with a weight percent between 30% and 90%, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

Response to Arguments

11. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501.

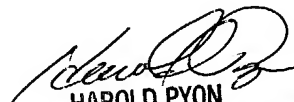
The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Catherine Simone
Examiner
Art Unit 1772
July 20, 2004



HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

7/21/04